

Use of Contractor Test Data for Acceptance Decisions

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Topics

1. Definitions and Terminology
2. Quality Assurance Program
3. Program Implementation
4. Challenges
5. Recommendations

DEFINITIONS

- ❑ *Quality Assurance Program*
- ❑ *Quality Control Testing*
- ❑ *Acceptance Testing*
- ❑ *Verification Testing*
- ❑ *Independent Assurance Inspection*
- ❑ *Quality Analysis*

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Quality Assurance Program

All planned and systematic actions necessary to provide adequate confidence that the product will perform as specified in the contract requirements. Quality Assurance Program includes Quality Control, Independent Assurance, Verification, Acceptance, and Quality Analysis. Required under FHWA 23 CFR 637.205 Policy

Quality Control Testing (QC)

The sum total of activities performed by the Contractor to ensure that a product meets contract specifications. This may include materials handling and construction procedures, calibration and maintenance of equipment, production process control, material sampling, testing, and inspection

Acceptance Testing (QA)

Sampling and testing performed to determine at what level the product or services will be accepted for payment.

Sampling and testing must be performed by qualified personnel and laboratories.

Who??

Currently-----AKDOT & PF

Future ----- Contractors??

Verification Testing

Independent sampling and testing performed by the Department ,or agent thereof, to verify the Contractor's results. This testing is also called F & T testing.

If the F & T analysis is considered consistent then the Contractor's test data will be used for pay.

Independent Assurance (IA) Inspection

Independent Assurance Inspection is an unbiased independent evaluation of all the sampling and testing procedures in the acceptance program. This includes the Contractor's QC and QA activities and the Departments Verification Testing activities.

Quality Level Analysis

Evaluation performed on consistent test data to determine percent of material within limits and to assign a pay factor to that material.

Review

- ✓ *Quality Assurance Program*
- ✓ *Quality Control Testing*
- ✓ *Acceptance Testing*
- ✓ *Verification Testing*
- ✓ *Independent Assurance Inspection*
- ✓ *Quality Analysis*

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Questions ?

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QUALITY ASSURANCE PROGRAM

Why use Contactor test data for acceptance decisions??

- ❑ *Improve quality and provide for the effective use of existing personnel.*
- ❑ *Quality cannot be specified, tested, nor inspected into a product, it must be built in by the contractor.*

23 CFR 637B

Contractor Quality Control sampling and testing results may be used as part of the acceptance decision provided:

- (a) Testing is performed by qualified personnel
- (b) Testing is validated by Verification Testing
- (c) Testing is evaluated by an IA program
- (d) Dispute Resolution Procedure is enacted
- (?) Sampling locations are the same.

Contractors Responsibilities

1. Qualified Personnel (WAQTC)
2. Quality Control Plan
3. Approved Testing Facilities and Equipment
4. Contractor Provided HMA Designs
5. Timely test reporting for comparison with Verification and IA test results

State Agency Responsibilities

1. Specifications
2. Laboratory Accreditation and Qualification
3. Personnel Training in Sampling and Testing
4. Verification Testing
5. Independent Assurance Testing
6. Acceptance and Payment Decisions
7. Dispute Resolution Procedures

Review

- ✓ Why use Contractor test data for Acceptance decisions?
- ✓ FHWA 23 CFR 637B
- ✓ Contractors Responsibilities
- ✓ State Agency Responsibilities

Questions ?

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IMPLEMENTATION

1. Department and Construction Industry Support
2. Program Goals
3. Specification Design
4. Dispute Resolution Procedures
5. Formal Training
6. Qualifications
7. Key Project Selection and Implementation

Support

- ❑ Department Support: Critical in the area of providing personnel, equipment, and training.
- ❑ Industry support: Extremely valuable in the technical aspects as well as promotion of the program.

Program Goals

Primary goal of a Quality Assurance Program: Improve quality and provide for the effective use of existing personnel.

Agencies should not implement a program for the purpose of reducing personnel requirements.

Specification Design

Specification design should be based on characteristics that will adequately measure quality.

- Sampling and testing procedures
- Laboratory accreditation and qualification
- Quality Control Plan requirements
- Technician Certification
- Dispute Resolution Procedures

Dispute Resolution Procedures

23 CFR 637B requires that a Dispute Resolution Procedure be enacted before Contractor's sampling and testing data can be used in the acceptance decision.

Formal Training

It is extremely important that formal training be developed and provided to all Department and Contractor personnel.

Training sessions are needed to ensure each group receives the same level of training.

Application of statistical methods, WAQTC qualifications, and spec training

Qualifications

23 CFR 637.209 a) and b) requires:

- ❑ Adequate, qualified Staff (WAQTC)
- ❑ Department set up a field laboratory qualification program for contractors and consultants.

Key Project Selection

This means that the Department must set up a Pilot Program and begin pre-selecting key projects then Administer and evaluate each project outcome before assigning new projects.

This also helps in refining the specs

CHALLENGES

1. Qualifying Contractors and Consultant Personnel
2. Availability of Accredited or Qualified Laboratories Statewide
3. Availability of qualified / experienced labor force
4. Formal Training (Statistical Analysis)

RECOMENDATIONS

1. Providing training to qualify all Contractor personnel
2. Change current specifications to require Contractors to provide QC data
3. Enact Field Lab Qualifications Procedures
4. Establish a temporary pay item for QC data